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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/089,399	07/22/2002	Takanori Kamada	10921.118USWO	4956
7590	10/03/2005		EXAMINER	
Hamre, Schumann, Mueller & Larson, P.C. P.O. BOX 2902-0902 Minneapolis, MN 55402			LUDLOW, JAN M	
			ART UNIT	PAPER NUMBER
			1743	
DATE MAILED: 10/03/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/089,399

Applicant(s)

KAMADA ET AL.

Examiner

Jan M. Ludlow

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– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 4,5,8,10,18 and 19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,6,7,9,11-17 and 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 July 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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1. Claims 4-5, 8, 10, 18-19 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on July 12, 2005.
2. Claims 13-17, 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. Claim 13 is unclear because it is incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: there is no connection between the column and detector, or between the supply and discharge paths and any other element. Claim 14 is unclear as a whole because it is an apparatus claim, but recites only method steps. What structural features, such as sample injector, source of eluent, and/or eluent pump, is applicant trying to claim? The method of preparing the sample and the content of the sample are not seen as limiting the apparatus. Further, in claim 14, "ratio" is unclear—ratio compared to what? Claim 15 is unclear as a whole because it is an apparatus claim, but recites only method steps. Further, the analyte is not a positively recited element of the invention and thus it is unclear how the limitation to the analyte limits the apparatus.
4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 1, 2, 9, 11-16, 20 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 11-166886 (hereafter "JP").

JP teaches a chromatographic flow cell having a supply flow path 112, discharge flow path 116, a first intermediate flow path 120 and second intermediate flow path 114. The first intermediate flow path 120 intersects the second intermediate flow path 114 throughout a portion of the diameter of path 114 (see, e.g., Fig. 3), and therefore intersects at positions both aligned with and offset from the central axis of second intermediate flow path 114. Specifically, the center line of path 120 is offset from the central axis of path 114, and the depth (cross section) of path 120 is smaller than the diameter of 114, 112 and 116 as shown. A chromatographic system as claimed is shown in Figure 1. With respect to claims 14-15, it is the examiner's position that the apparatus of JP is structurally capable of the intended use recited.

9. Claims 1, 2, 9, 11-16, 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Sugiyama (6122049).

Sugiyama teaches a chromatographic flow cell having a supply flow path 112, discharge flow path 116, a first intermediate flow path 120 and second intermediate flow path 114. The first intermediate flow path 120 intersects the second intermediate flow path 114 throughout a portion of the diameter of path 114 (see, e.g., Fig. 3), and therefore intersects at positions both aligned with and offset from the central axis of second intermediate flow path 114. Specifically, the center line of path 120 is offset from

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the central axis of path 114, and the depth (cross section) of path 120 is smaller than the diameter of 114, 112 and 116 as shown. A chromatographic system as claimed is shown in Figure 1. With respect to claims 14-15, it is the examiner's position that the apparatus of JP is structurally capable of the intended use recited.

10. Claims 1-3, 6-7, 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Hrdina (3520517).

Hrdina teaches a chromatographic flow cell having supply flow path 17, discharge flow path 18, a first intermediate flow path at the end of path 17 (comprising the taper and smaller diameter section), and second intermediate flow path between 17 and 18 as shown in Figures 4a-4b, corresponding to bore 2 of Figure 1. The first intermediate flow path is tapered, smaller than the other flow paths, and offset from the axis of cylindrical (Fig. 4b) second intermediate flow path. With respect to claim 6, Hrdina teaches that supply flow path 17 is a needle, the end of which may be tapered and narrowed (the tapered and narrow portion being the instant first intermediate path). It is the examiner's position that a needle so formed inherently has a second section of uniform cross section as shown in Figure 4b and as claimed..

11. Claims 13-17, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hrdina as applied to claims above, and further in view of JP or Sugiyama.

Hrdina fails to teach the chromatographic system.

JP and Sugiyama each teach the chromatographic system as claimed (Fig. 1).

It would have been obvious to provide the flow cell of Hrdina in the chromatographic system of JP or Sugiyama in order to use the flow cell for its stated

intended use in a chromatographic system. With respect to claims 14-15, it is the examiner's position that the apparatus of JP is structurally capable of the intended use recited.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jan M. Ludlow whose telephone number is (571) 272-1260. The examiner can normally be reached on Monday-Thursday, 11:30 am - 8:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill A. Warden can be reached on (571) 272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jan M. Ludlow
Primary Examiner
Art Unit 1743

Jml
September 29, 2005